

Page 2

Appl. No. 09/944,511  
Reply to Office action of 03/07/2005

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

Claim 1 (currently amended): A process for converting a hydrocarbon feed stream comprising:

~~passing a reformulation an upgrade feed stream including saturated and olefinic hydrocarbons with carbon numbers of 5-8 to a reformulating to an upgrading~~  
reactor containing catalyst particles having a composition including crystalline alumina silicate or zeolite;

~~reformulating contacting said reformulation feed stream in said reformulating upgrading reactor with regenerated catalyst from a regenerator to produce a reformulated an upgrade product stream, said reformulating proceeding at conditions that promote at least a 5% net yield increase in aromatics on a fresh reformulation feed basis indicating the occurrence of hydrogen transfer reactions; and~~

~~recovering said reformulated upgraded product stream from said contacted catalyst; sending said contacted catalyst to said regenerator;~~

~~wherein said reformulation feed stream is prepared by:~~

~~cracking a preliminary cracking feed stream with catalyst particles in a cracking reactor to produce a cracked product, said catalyst particles in said cracking reactor having [[a]] the same composition as the catalyst particles in said reformulating upgrading reactor;~~

~~separating said cracked product from said catalyst particles in a separator vessel to obtain a cracked product stream and spent catalyst; [[and]]~~

~~regenerating at least a portion of said spent catalyst in said regenerator; and~~

~~recovering at least a portion of said cracked product stream to be said reformulation feed stream.~~

Claim 2 (canceled)

Claim 3 (currently amended): The process of claim 1 further including isolating said reformulated upgraded product stream from said cracked product stream.

Claim 4 (currently amended): The process of claim 1 further comprising the step of cycling catalyst particles that had previously resided in said cracking reactor to said reformulating upgrading reactor.

Page 3

Appl. No. 09/944,511  
Reply to Office action of 03/07/2005

Claim 5 (currently amended): The process of claim 1 wherein ~~a greater proportion of hydrocarbons with carbon numbers of 5-8 undergo hydrogen transfer reaction than cracking reaction~~ said regenerator provides regenerated catalyst to the cracking reactor and the upgrading reactor.

Claim 6 (currently amended): The process of claim 1 wherein ~~olefins in said reformulation feed stream convert to isoparaffins in the reformulating reactor~~ the upgrade feed stream has an initial boiling point below about 200°C (392°F).

Claim 7 (currently amended): The process of claim 1 wherein the concentration of sulfur compounds in the ~~reformulated~~ upgraded product stream is less than its concentration in the ~~reformulation~~ upgrade feed stream.

Claim 8 (currently amended): The process of claim 1 wherein the concentration of nitrogen compounds in the ~~reformulated~~ upgraded product stream is less than its concentration in the ~~reformulation~~ upgrade feed stream.

Claim 9 (currently amended): The process of claim 1 wherein the ~~reformulation upgrade feed stream has an initial boiling point below about 200°C (392°F)~~ is a portion of the cracked product stream.

Claim 10 (currently amended): A process for converting a hydrocarbon feed stream comprising:

contacting said hydrocarbon feed stream with catalyst particles having a composition in a first reactor to produce a cracked product and spent catalyst particles;

separating said cracked product from said catalyst particles in a vessel to obtain a cracked product stream;

recovering a ~~naphtha~~ an upgrade feed stream from said cracked product stream; ~~said naphtha stream having an initial boiling point below 127°C (260°F);~~

regenerating said spent catalyst particles in a regenerator to obtain regenerated catalyst particles;

contacting said ~~naphtha~~ upgrade feed stream with regenerated catalyst particles having said composition in a second reactor to produce an upgraded product stream and contacted catalyst; [[and]]

sending said contacted catalyst to said regenerator; and

recovering said upgraded product stream and isolating said upgraded product stream from said cracked product stream.

Claim 11 (original): The process of claim 10 wherein hydrogen transfer reactions predominate over cracking reactions in the second reactor

Page 4

Appl. No. 09/944,511  
Reply to Office action of 03/07/2005

Claim 12 (currently amended): The process of claim 10 wherein ~~olefins convert to aromatics in the second reactor~~ the upgrade feed is a naphtha stream.

Claim 13 (currently amended): The process of claim ~~[[10]]~~ 12 wherein ~~olefins convert to isoparaffins in the secondary reactor~~ said naphtha stream has an initial boiling point below 127°C.

Claim 14 (currently amended): The process of claim 10 wherein the concentration of sulfur compounds in the upgraded product stream is 50% less than its concentration in the ~~naphtha stream~~ upgrade feed.

Claim 15 (currently amended): The process of claim ~~[[10]]~~ 12 wherein said naphtha stream has an end point below 230°C (446°F).

Claim 16 (original): The process of claim 10 wherein said catalyst particles in said second reactor previously resided in the first reactor.

Claim 17 (currently amended): A process for converting a hydrocarbon feed stream comprising:

- contacting said hydrocarbon feed stream with catalyst particles having a composition in a first reactor to produce a cracked product;
- separating said cracked product from ~~[[said]]~~ spent catalyst particles in a vessel to obtain a cracked product stream;
- regenerating said spent catalyst particles in a regenerator;
- recovering an oil stream from said cracked product stream ~~having an initial boiling point above about 200°C (392°F);~~
- cycling catalyst particles that had resided in said first reactor to a second reactor, said second reactor being discrete from said vessel;
- contacting said oil stream with catalyst particles in a second reactor to produce an upgraded product stream and contacted catalyst particles; [[and]]
- recovering said upgraded product stream and isolating said upgraded product stream from said cracked product stream~~[[.]]; and~~
- sending said contacted catalyst particles to said regenerator.

Claim 18 (original): The process of claim 17 further comprising the step of hydrotreating said oil stream.

Claim 19 (original): The process of claim 17 wherein no hydrogen is added to the second reactor.

Claim 20 (original): The process of claim 17 wherein the end point of said oil stream is below about 288°C (550°F).